

**REQUEST FOR PROPOSALS**  
**under the**  
**LANL-UNM Memorandum of Understanding**  
**March 27, 2006**

**Background**

Los Alamos National Laboratory (LANL) and the University of New Mexico (UNM) signed a Memorandum of Understanding (MOU) on October 16, 2003. Designed to increase collaboration between LANL and UNM in research, education, recruitment, and retention, the MOU provides opportunities for UNM graduate and undergraduate students, postdoctoral researchers, and faculty to participate in innovative research collaborations with LANL. The agreement will enhance synergy and cross-fertilization of ideas with particular focus on the areas of bioscience, materials, quantum information science, computer science, distributed sensor networks (including but not limited to chemical/biological detection), and nuclear futures (including nuclear applications). Both LANL and UNM will make research space and facilities available to staff involved in exchanges, visits, and sabbaticals. Scientific and technical workshops can also be supported under the program. A Management Committee consisting of representatives from each partner is responsible for defining and implementing a process to solicit and select collaborative research proposals. The committee is co-chaired by Paul Follansbee (LANL) and Jack McIver (UNM).

**REQUEST FOR PROPOSALS**

The LANL-UNM MOU Management Committee hereby invites proposals to be considered for funding under the LANL-UNM Memorandum of Understanding. Topics of interest include:

- Bioscience,
- Materials,
- Quantum information science,
- Computer science,
- Distributed sensor networks (including but not limited to chemical/biological detection), and
- Nuclear futures (including nuclear applications)

The timeline for the solicitation is as follows:

**Distribution of RFP: March 27, 2006**

**Deadline for Proposals: April 13, 2006**

**Notification of Successful Proposals: April 28, 2006**

**Availability of Funds: After May 15, 2006**

**Collaborative Research Project Awards:** The proposed research should be collaborative and should build upon the complementary capabilities and research facilities of LANL and UNM.

Each proposal should describe work to be performed for a period not to exceed one year. Total funding for this cycle will provide approximately \$500,000. Proposals shall provide significant opportunities for student and postdoctoral involvement. These projects awards are not intended to be a source of continuing support. All funded projects require an annual report within 30 days after the project period.

This call will not accept third-year funding for existing JSTL efforts. All projects must be completed by the projected completion date. There will be no “no-cost” extensions.

### **Institutional Goals**

While preparing proposals, it is important to bear in mind the institutional goals of each partner, which include the following:

#### **LANL**

- Sustained partnership with UNM in the research focus areas with numerous research projects **involving graduate students and postdocs**
- Identification and recruitment of excellent scientists/engineers to work at LANL
- Assistance of graduate research assistants and postdocs in reinvigorating and sustaining science programs at the Laboratory

#### **UNM**

- Close interactions with LANL and use of facilities for collaborative research
- Opportunities for graduate students and postdocs to work on cutting-edge problems of long-term interest to LANL **that will result in substantial jointly funded programs**
- Funding to develop collaborative seed projects
- Support in **building a sustained, long-term strategic research capability** at UNM aligned with Los Alamos

### **Proposal Format and Content**

Proposals should fit within one or more of the topics of interest listed above. Proposals must not exceed five pages of narrative (12 point font, single-spaced) with a one-page budget. All proposals must include at least one Principal Investigators (PI) from UNM, at least one PI from LANL, and at least one graduate student or postdoc. A 2-month housing allowance must be included for graduate students or postdocs to spend two months of the summer working at LANL.

**Description of the Research Project**, no more than five (5) single-spaced pages. The type size should be clear and legible, in standard 12-point type with one-inch margins on all sides. The narrative should briefly describe the following:

- Background and rationale: (research area background and rationale for proposed project)
- Research objective and goals
- Technical impact
- How the project fulfills the criteria set by the program (see criteria below)

- Research activities to be supported and plan of work
- Anticipated outcome/results and significance
- Role of each Co-PI and Lead PI in the project. How the joint research, communication, and exchange is going to be facilitated (e.g., by faculty visit(s) to LANL, by LANL staff visit(s) to UNM, by students or postdoctoral scholars working on-site at LANL).
- Identified students who will participate
- Other funding sources (whether funding is being leveraged by other sources)
- Capabilities at UNM and LANL (include both relevant facilities and expertise)
- Biographical sketch for each PI and co-PI.

### **Budget**

The total budget available for this call is \$500K. Budgets for individual proposed projects submitted for this call should not exceed a total of \$100K. No indirect costs are allowed on projects funded under the LANL-UNM MOU. Salary recovery and support expenses such as travel for LANL personnel are allowed. The budget may include one-year's support for a graduate student or postdoc plus expenses for two-month's residence in Los Alamos during the summer. Travel expenses should be included for both LANL and UNM personnel expected to travel back and forth between Los Alamos and Albuquerque.

A Sample Budget is shown below:

<b>Categories</b>	<b>Estimated Amount</b>
1. Graduate student \$25,000/year (academic year + summer)	\$25,000
<b>or</b>	<b>or</b>
Postdoc (\$35,000/year)	35,000
3. Housing for graduate student or postdoc for two months in Los Alamos (Housing + \$39/day for meals)	4,000
4. Travel (\$240.75 roundtrip mileage + \$100/day)	6,000
5. Supplies, equipment	20,000
6. Other Personnel support (summer support for faculty members or support for LANL personnel)	30,000

Above all, the budget should be realistic for the scope of work proposed while staying within the cap of \$ 100,000 for the one-year period of funding.

### **Selection Criteria**

Each proposal must have an education component (graduate student or postdoc involvement) and should include a plan for the implementation period. In addition, the following elements should be included:

- provision for substantial research to occur on-site at LANL
- real-world utility of the work and its impact
- collaboration and strategic alignment of the partner institutions
- cross-disciplinary approaches
- **the potential sustainability of the proposed work and a plan of how continued support will be solicited when support from LANL has terminated**

The following selection criteria will be used by the Management Committee to make decisions about which proposals to fund:

- |  |           |
|--|-----------|
| • Quality of science—creative, innovative                | 30 points |
| • Collaboration—PIs, facilities, students                | 25 points |
| • Qualifications of PIs                                  | 15 points |
| • Sustainability, long-term strategy, real-world utility | 15 points |
| • Leverage with existing programs                        | 15 points |

These criteria should stand out in the proposal narrative.

### **Project Review and Reporting**

There will be a review of project progress at the end of the year. A progress report is required at the end of the year and a final report is required within 30 days after the project period.

### **Submission of Proposals**

All submissions should be electronic and should be sent by email to the UNM Vice President for Research and Economic Development ([jmciver@unm.edu](mailto:jmciver@unm.edu)). (At UNM, questions may be addressed to Rob Duncan (Associate Dean for Research, College of Arts and Sciences), 505-277-3186, [duncan@unm.edu](mailto:duncan@unm.edu). At LANL, questions may be Reynaldo Morales, 505-667-7824 ([morales\\_r@lanl.gov](mailto:morales_r@lanl.gov)) or to Cynthia Bustos, 505-667-7824 ([clbustos@lanl.gov](mailto:clbustos@lanl.gov)).